Federal Communications Commission - FCC 07-198
Rural Health Care Pilot Program – Universal Service Administrative Company
Quarterly Data Report – May 1 – July 30, 2009

Submitted July 30, 2009

HCP 17228 Kansas Board of Regents / Kan-ed

1. Project Contact and Coordination Information

There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

a. Identify the project leader(s) and respective business affiliations.

Bradley S. Williams, CIO – Kansas Board of Regents, Kan-ed Executive Director
Project Coordinator – HCP 17228 Kansas University Medical Center / Kan-ed

Randy Stout, R&D Coordinator – Kan-ed, Kansas Board of Regents
Associate Project Coordinator – HCP 17228 Kansas University Medical Center / Kan-ed

Jerry Huff, J.D., Director of Operations – Kan-ed, Kansas Board of Regents
Charmine Chambers, Network Access Manager – Kan-ed, Kansas Board of Regents
Don Deitrich, Consultant, - Deitrich Lockhard & Associates,
Randall White, Consultant – Calence, LLC.

b. Provide a complete address for postal delivery and the telephone, fax, and e-mail address for the responsible administrative official.

Randy Stout, Coordinator
Research & Development
Kansas Board of Regents - KAN-ED
1000 SW Jackson St., Suite #520
Topeka, Kansas 66612-1368
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1.c. Identify the organization that is legally and financially responsible for the conduct of activities supported by the award.

Kansas Board of Regents - KAN-ED
1000 SW Jackson St., Suite #520
Topeka, Kansas 66612-1368

d. Explain how project is being coordinated throughout the state or region.

The state of Kansas has established network resources that meet anticipated requirements for participating health care providers and that are consistent with *section 254(h)(2)(A) of the 1996 Act.* The Project Coordinator has shared purpose, status, and scope of the FCC Rural Health Care Pilot Project in Kansas with the Health Information Advisory Panel, a group chartered to develop and maintain an advisory forum to the Governor of Kansas about the coordination of HIT/HIE with input from experts on the needs, availability of resources and opportunities to facilitate adoption of HIT/HIE in Kansas. The Advisory Panel is organized by the Kansas Health Policy Authority and includes appointed representation from key stakeholder constituencies. Kan-ed works closely with the Kansas Hospital Association, the Kansas University Medical Center and numerous Regional Hospitals to develop health care applications and appropriate measures to support and/or expand the secure, reliable, high speed connectivity platform for telemedicine and distance education for the health care providers in the network. All Kansas hospitals that participate in Kan-ed's e-Health networking environment will provide a letter of agency (LOA) for the FCC project. An implementation team for the FCC RHCPP is integrated in the new network's project implementation plan (see attachment 1-A).

2. Identify all health care facilities included in the network.
There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

a. Provide address (including county), zip code, Rural Urban Commuting Area (RUCA) code (including primary and secondary), six-digit census tract, and phone number for each health care facility participating in the network.

(see attachment 1-B)

b. For each participating institution, indicate whether it is:

i. Public or non-public;
ii. Not-for-profit or for-profit;
iii. An eligible health care provider or ineligible health-care provider with an explanation of why the health care facility is eligible under section 254 of the 1996 Act and the Commission's rules or a description of the type of ineligible health care provider entity.

3. Network Narrative: In the first quarterly report following the completion of the competitive bidding process and the selection of vendors, the selected participant must submit an updated technical description of the communications network that it intends to implement, which takes into account the results of its network design studies and negotiations with its vendors. This technical description should provide, where applicable:

There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

a. Brief description of the backbone network of the dedicated health care network, *e.g.*, MPLS network, carrier-provided VPN, a SONET ring;

b. Explanation of how health care provider sites will connect to (or access) the network, including the access technologies/services and transmission speeds;

c. Explanation of how and where the network will connect to a national backbone such as NLR or Internet2;

d. Number of miles of fiber construction, and whether the fiber is buried or aerial;

e. Special systems or services for network management or maintenance (if applicable) and where such systems reside or are based.

a). The network backbone currently being implemented to serve the Kan-ed network consists of provider edge routers at ingress and egress that reinforce class of service traffic with increased bandwidth, reduced backbone expense and robust features in an MPLS enabled, IPv6 compliant, non-public networking environment. HCP's participating in the FCC RHCPP in Kansas will establish access to a common platform for ongoing and future HIE activities. The availability of this solution is scheduled to begin in January of 2009.

b). The standards based architecture ensures that open systems and any-to-any connectivity are available to the network's hospital members. The new network specifications will support classes of service (CoS) and quality of service (QoS) and enable video and data and other optional Internet applications over a single connection.

c). Kan-ed contracts for it's network operations center (NOC) located in Lawrence, Kansas. The research and education network in Kansas, KanREN, Inc[1]. manages and monitors operation of the Kan-ed network and facilitates the interconnection between the Kan-ed network and Internet2, a national backbone for advanced networking resources with a fiber link in a non-public peering facility at the Kansas City GigaPoP.

d). Not applicable

e). The Kan-ed NOC is responsible for all technical support calls. The Kan-ed NOC maintains a Tier 1 Technical Assistance Group to provide first contact troubleshooting and general customer support information. The Tier 2 Administrator Group provides network configuration, network and systems administration. A Tier 3 Engineering Group provides network and systems design and implementation. The Tier-Video team provides technical coordination and troubleshooting support for scheduled videoconferencing among network endpoints.

4. List of Connected Health Care Providers: Provide information below for all eligible and noneligible health care provider sites that, as of the close of the most recent reporting period, are connected to the network and operational.

There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

[1] For more information about KanREN see http://www.kanren.net/

a. Health care provider site;

b. Eligible provider (Yes/No);

c. Type of network connection (*e.g.*, fiber, copper, wireless);

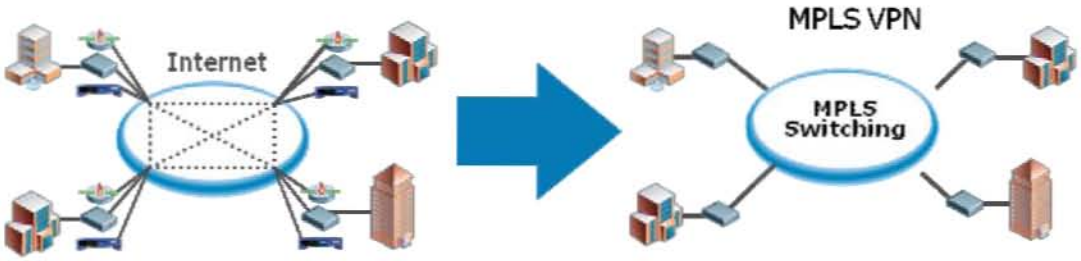
d. How connection is provided (*e.g.*, carrier-provided service; self-constructed; leased facility);

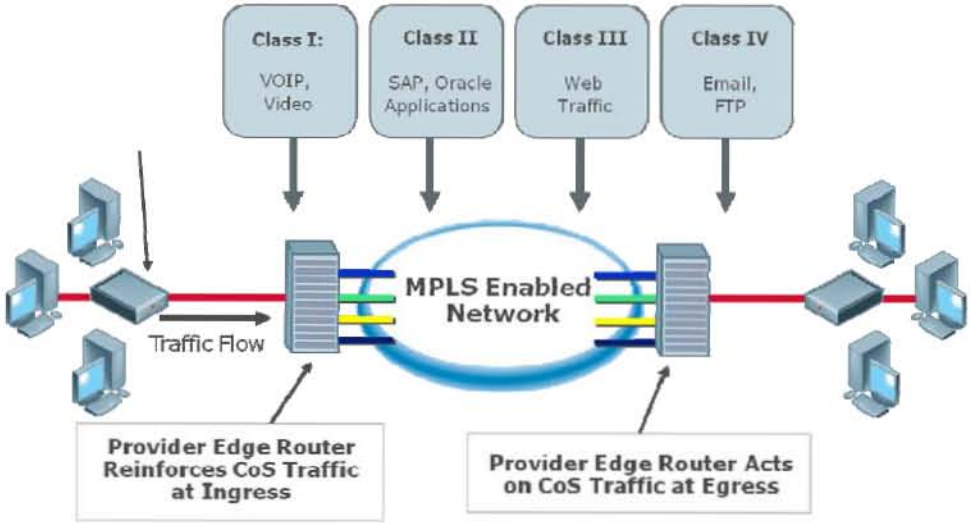
e. Service and/or speed of connection (*e.g.*, DS1, DS3, DSL, OC3, Metro Ethernet (10 Mbps);

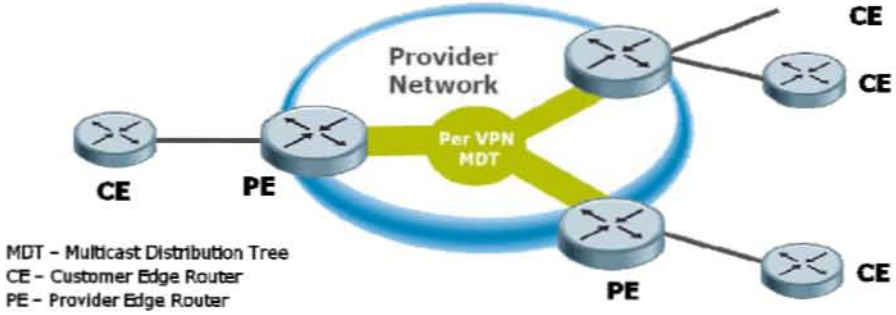
f. Gateway to NLR, Internet2, or the Public Internet (Yes/No);

g. Site Equipment (*e.g.*, router, switch, SONET ADM, WDM), including manufacturer name and model number.

h. Provide a logical diagram or map of the network.







5. Identify the following non-recurring and recurring costs[2], where applicable shown both as budgeted and actually incurred for the applicable quarter and funding year to-date.
There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

No costs, either non-recurring or recurring, have been either budgeted or incurred during the applicable quarter. More detail will be forthcoming in subsequent quarterly reports.

a. Network Design:

b. Network Equipment, including engineering and installation:

c. Infrastructure Deployment/Outside Plant

i. Engineering

ii. Construction

d. Internet2, NLR, or Public Internet Connection

e. Leased Facilities or Tariffed Services

f. Network Management, Maintenance, and Operation Costs (not captured elsewhere)

g. Other Non-Recurring and Recurring Costs

6. Describe how costs have been apportioned and the sources of the funds to pay them:
There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

No project funding has been committed or expended to date.

a. Explain how costs are identified, allocated among, and apportioned to both eligible and ineligible network participants.

b. Describe the source of funds from:

i. Eligible Pilot Program network participants

ii. Ineligible Pilot Program network participants

c. Show contributions from all other sources (*e.g.*, local, state, and federal sources, and other grants).

i. Identify source of financial support and anticipated revenues that is paying for costs not covered by the fund and by Pilot Program participants.

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[2] Non-recurring costs are flat charges incurred only once when acquiring a particular service or facility. Recurring costs are costs that recur, typically on a monthly basis, because they vary with respect to usage or length of service contract.

ii. Identify the respective amounts and remaining time for such assistance.

d. Explain how the selected participant's minimum 15 percent contribution is helping to achieve both the selected participant's identified goals and objectives and the overarching goals of the Pilot Program.

7. Identify any technical or non-technical requirements or procedures necessary for ineligible entities to connect to the participant's network.

There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

Both technical and non-technical requirements and procedures necessary for ineligible entities to connect to the proposed e-Health network are yet to be determined.

8. Provide an update on the project management plan, detailing:

a. The project's current leadership and management structure and any changes to the management structure since the last data report; and

b. In the first quarterly report, the selected applicant should provide a detailed project plan and schedule. The schedule must provide a list of key project deliverables or tasks, and their anticipated completion dates. Among the deliverables, participants must indicate the dates when each health care provider site is expected to be connected to the network *and operational*. Subsequent quarterly reports should identify which project deliverables, scheduled for the previous quarter, were met, and which were not met. In the event a project deliverable is not achieved, or the work and deliverables deviate from the work plan, the selected participant must provide an explanation.

The project will submit one master Form 465 for the entire scope of local layer access connections including router, router maintenance and router/circuit installation for all participating HCP's. A project management plan with that specifies deliverables, tasks, and timelines will be submitted in the next quarterly report.

At the time of submission for the present quarterly report, additional detail from eligible HCP's regarding the specifications and requirements for service to network endpoints have been compiled. The HCP's have submitted service request descriptions and site surveys to Kan-ed. These data provide contact information for CEO, billing contact, and technical contacts. These data also provide number of requested circuits, bandwidth requirements, and physical location of demarcation for circuit termination at the premise. Additional organizational information is also provided. The data have been submitted to Kan-ed through two web based survey instruments and the scope of work for deployment of Layer 3, MPLS enabled AVPN is currently undergoing further redefinition for comparison to the scope of work proposed in the approved RHCPP proposal submitted in May of 2007. The information currently being compiled will form the basis of a proposed change in scope document to be submitted for RHC approval. Preliminary data identify 83 Critical Access Hospitals (CAH's) with membership in the Kan-ed network, 36 of which will migrate and upgrade connections to advanced network services. Additionally, 29 CAH's have requested service and plan for connections to the Kan-ed AVPN, and 21 CAH's still in the process of determining their requirements and submission of data to Kan-ed.

There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

9. Provide detail on whether network is or will become self sustaining. Selected participants should provide an explanation of how network is self sustaining.
There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

Funds supporting the costs of operation for a statewide backbone network to which eligible HCP's may connect for telehealth and telemedicine have been committed by the Kansas Board of Regents Kan-ed network. Cost modeling for a series of options supporting access layer connection for HCP's is being developed to estimate levels of budget commitment necessary beyond 2011 and will be employed as decision point support in establishing levels of participation from HCP budgets and from state sources. It is anticipated that a feasible sustainability plan may result in a positive impact on the "expected contribution factor" for the USF both in Kansas and for USAC. Financial assumptions key to modeling cost recovery for the period of performance in the RHC pilot project and subsequent out-years are:

- **Incremental increases in the level of budgetary commitment from local sources (participating HCP's) from 15% to 40% over the course of 6 years.**
- **Level of budget committed to access layer costs from state programs sources increases incrementally from approximately 10% to 35% over 6 years.**
- **RHC Pilot Project funds 85% through the project period of performance. Beyond the close of the funding from the Pilot, the level of participation from this federal source is projected at the current RHC funding program rate of 25% for reimbursement of eligible expenditures.**

10. Provide detail on how the supported network has advanced telemedicine benefits:
Not applicable at this time.

a. Explain how the supported network has achieved the goals and objectives outlined in selected participant's Pilot Program application;

b. Explain how the supported network has brought the benefits of innovative telehealth and, in particular, telemedicine services to those areas of the country where the need for those benefits is most acute;

c. Explain how the supported network has allowed patients access to critically needed medical specialists in a variety of practices without leaving their homes or communities;

d. Explain how the supported network has allowed health care providers access to government research institutions, and/or academic, public, and private health care institutions that are repositories of medical expertise and information;

e. Explain how the supported network has allowed health care professional to monitor critically ill patients at multiple locations around the clock, provide access to advanced applications in continuing education and research, and/or enhanced the health care community's ability to provide a rapid and coordinated response in the event of a national crisis.

11. Provide detail on how the supported network has complied with HHS health IT initiatives:
There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

As is indicated in the project proposal, a significant number of hospitals that will participate in the pilot project are in the operational phase of telemedicine and telehealth delivery over a variety of connection modalities in an ad hoc group of autonomous systems. The HCP's conducting these e-Health activities who participate in the RHCPP will migrate to a common connectivity platform and integrate HIT/HIE within a common network architecture that enables HCP's to implement appropriate privacy standards and security protocols for collaboration within regional and state HIE systems and with the NHIN. Additional detail with respect to 11.a through 11.f below will be available in subsequent quarterly reports.

a. Explain how the supported network has used health IT systems and products that meet interoperability standards recognized by the HHS Secretary;

b. Explain how the supported network has used health IT products certified by the Certification Commission for Healthcare Information Technology;

c. Explain how the supported network has supported the Nationwide Health Information Network (NHIN) architecture by coordinating activities with organizations performing NHIN trial implementations;

d. Explain how the supported network has used resources available at HHS's Agency for Healthcare Research and Quality (AHRQ) National Resource Center for Health Information Technology;

e. Explain how the selected participant has educated themselves concerning the Pandemic and All Hazards Preparedness Act and coordinated with the HHS Assistant Secretary for Public Response as a resource for telehealth inventory and for the implementation of other preparedness and response initiatives; and

f. Explain how the supported network has used resources available through HHS's Centers for Disease Control and Prevention (CDC) Public Health Information Network (PHIN) to facilitate interoperability with public health and emergency organizations.

12. Explain how the selected participants coordinated in the use of their health care networks with the Department of Health and Human Services (HHS) and, in particular, with its Centers for Disease Control and Prevention (CDC) in instances of national, regional, or local public health emergencies (*e.g.*, pandemics, bioterrorism). In such instances, where feasible, explain how selected participants provided access to their supported networks to HHS, including CDC, and other public health officials.
There are no changes in the response to this data report item since the previous Quarterly Data Report (filed 04/30/09).

Additional detail with respect to item 12 will be available in subsequent quarterly reports.